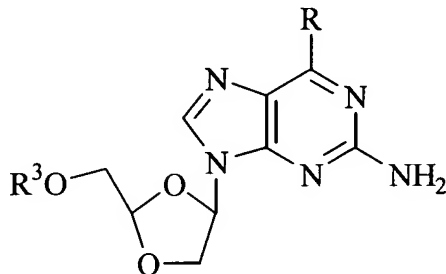


### AMENDMENT TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application.

#### Listing of claims:

Claim 1 (Currently Amended): A pharmaceutical composition for the treatment ~~or~~ ~~prophylaxis~~ of an HIV infection in a host, comprising an effective amount of a  $\beta$ -D-1,3-dioxolanyl purine of the formula:



or its pharmaceutically acceptable salt, wherein

R is H, OH, Cl, NH<sub>2</sub> or NR<sup>1</sup>R<sup>2</sup>;

R<sup>1</sup> and R<sup>2</sup> are independently hydrogen, alkyl or cycloalkyl[<sub>1-6</sub>]; and

R<sup>3</sup> is H, alkyl, aryl, acyl, phosphate, ~~including~~ ~~monophosphate~~, ~~diphosphate~~, ~~or~~ ~~triphosphate~~, ~~or~~ a stabilized phosphate moiety, ~~including~~ a phospholipid, or an ~~etherlipidin ether lipid~~;

in combination with at least one inosine monophosphate dehydrogenase (IMPDH) inhibitor, optionally in a pharmaceutically acceptable carrier or diluent.

Claim 2 (Original): The composition of claim 1, wherein the  $\beta$ -D-1,3-dioxolanyl purine is (-)-(2R,4R)-2-amino-9-[(2-hydroxymethyl)-1,3-dioxolan-4-yl]-adenine (DAPD).

Claim 3 (Original): The composition of claim 1, wherein the  $\beta$ -D-1,3-dioxolanyl purine is (-)-(2R,4R)-9-[(2-hydroxymethyl)-1,3-dioxolan-4-yl]-guanine (DXG).

Claim 4 (Original): The composition of any one of claims 1-3, wherein the IMPDH inhibitor is selected from the group consisting of ribavirin, mycophenolic acid, benzamide riboside, tiazofurin, selenazofurin, 5-ethynyl-1- $\beta$ -D-ribofuranosylimidazole-4-carboxamide (EICAR) and (S)-N-3-[3-(3-methoxy-4-oxazol-5-yl-phenyl)-ureido]-benzyl-carbamic acid tetrahydrofuran-3-yl-ester (VX-497).

Claim 5 (Currently Amended): The composition of claim 4, wherein the IMPDH inhibitor ~~inhibitors~~ is mycophenolic acid.

Claim 6 (Currently Amended): The composition of claim 4, wherein the IMPDH inhibitor ~~inhibitors~~ is ribavirin.

Claim 7 (Original): The composition of claims 1-6, wherein the  $\beta$ -D-1,3-dioxolanyl purine is enantiomerically enriched.

Claim 8 (Original): The composition of claim 1 in a pharmaceutically acceptable carrier suitable for oral delivery.

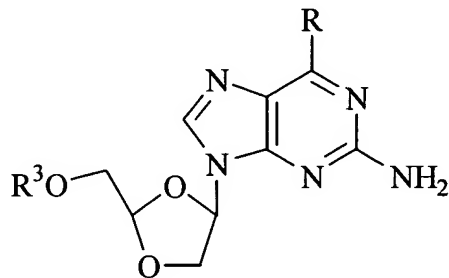
Claim 9 (Original): The composition of claim 1 in a pharmaceutically acceptable carrier suitable for intravenous delivery.

Claim 10 (Original): The composition of claim 1 in a pharmaceutically acceptable carrier suitable for parenteral delivery.

Claim 11 (Original): The composition of claim 1 in a pharmaceutically acceptable carrier suitable for topical delivery.

Claim 12 (Original): The composition of claim 1 in a pharmaceutically acceptable carrier suitable for systemic delivery.

Claim 13 (Currently Amended): A method for the treatment ~~or prophylaxis~~ of a drug resistant strain of HIV infection in a host in need thereof, comprising administering an effective amount of a  $\beta$ -D-1,3-dioxolanyl purine of the formula:



or its pharmaceutically acceptable salt, wherein

R is H, OH, Cl, NH<sub>2</sub> or NR<sup>1</sup>R<sup>2</sup>;

R<sup>1</sup> and R<sup>2</sup> are independently hydrogen, alkyl or cycloalkyl[.]; and

R<sup>3</sup> is H, alkyl, aryl, acyl, phosphate, ~~including~~ monophosphate, diphosphate, or triphosphate, ~~or a stabilized phosphate moiety, a phospholipid, or an ether lipid;~~

in combination ~~or alternation~~ with an inosine monophosphate dehydrogenase (IMPDH) inhibitor ~~inhibitors~~, optionally in a pharmaceutically acceptable carrier or diluent.

Claim 14 (Original): The method of claim 13, wherein the  $\beta$ -D-1,3-dioxolanyl purine is (-)-(2R,4R)-2-amino-9-[(2-hydroxymethyl)-1,3-dioxolan-4-yl]-adenine (DAPD).

Claim 15 (Original): The method of claim 13, wherein the  $\beta$ -D-1,3-dioxolanyl purine is (-)-(2R,4R)-9-[(2-hydroxymethyl)-1,3-dioxolan-4-yl]-guanine (DXG).

Claim 16 (Original): The method of any one of claims 13-15, wherein the IMPDH inhibitor is selected from the group consisting of ribavirin, mycophenolic acid, benzamide riboside, tiazofurin, selenazofurin, 5-ethynyl-1- $\beta$ -D-ribofuranosylimidazole-4-carboxamide (EICAR) and (S)-N-3-[3-(3-methoxy-4-oxazol-5-yl-phenyl)-ureido]-benzyl-carbamic acid tetrahydrofuran-3-yl-ester (VX-497).

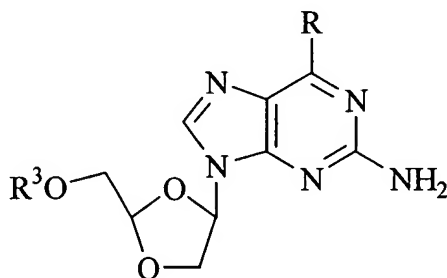
Claim 17 (Original): The method of claim 16, wherein the IMPDH inhibitor is mycophenolic acid.

Claim 18 (Original): The method of claim 16, wherein the IMPDH inhibitor is ribavirin.

Claim 19 (Original): The method of claim 16, wherein the HIV infection is resistant to DAPD and/or DXG.

Claim 20 (Original): The method of any one of claims 13-19, wherein the host is a human.

Claim 21 (Currently Amended): A method for the treatment ~~or prophylaxis~~ of HIV infection in a host in need thereof, comprising administering an effective amount of a  $\beta$ -D-1,3-dioxolanyl purine of the formula:



or its pharmaceutically acceptable salt, wherein

or its pharmaceutically acceptable salt, wherein

R is H, OH, Cl, NH<sub>2</sub> or NR<sup>1</sup>R<sup>2</sup>;

R<sup>1</sup> and R<sup>2</sup> are independently hydrogen, alkyl or cycloalkyl[[,]]; and

R<sup>3</sup> is H, alkyl, aryl, acyl, phosphate, ~~including~~ monophosphate, diphosphate, or triphosphate, or a stabilized phosphate moiety, a phospholipid, or an ether lipid;

in combination ~~or alternation~~ with an inosine monophosphate dehydrogenase (IMPDH) inhibitor ~~inhibitors~~, optionally in a pharmaceutically acceptable carrier or diluent.

Claim 22 (Original): The method of claim 21, wherein the  $\beta$ -D-1,3-dioxolanyl purine is (-)-(2R,4R)-2-amino-9-[(2-hydroxymethyl)-1,3-dioxolan-4-yl]-adenine (DAPD).

Claim 23 (Original): The method of claim 21, wherein the  $\beta$ -D-1,3-dioxolanyl purine is (-)-(2R,4R)-9-[(2-hydroxymethyl)-1,3-dioxolan-4-yl]-guanine (DXG).

Claim 24 (Original): The method of any one of claims 21-23, wherein the IMPDH inhibitor is selected from the group consisting of ribavirin, mycophenolic acid, benzamide riboside, tiazofurin, selenazofurin, 5-ethynyl-1- $\beta$ -D-ribofuranosylimidazole-4-carboxamide

(EICAR) and (S)-N-3-[3-(3-methoxy-4-oxazol-5-yl-phenyl)-ureido]-benzyl-carbamic acid tetrahydrofuran-3-yl-ester (VX-497).

Claim 25 (Original): The method of claim 24, wherein the IMPDH inhibitor is mycophenolic acid.

Claim 26 (Original): The method of claim 24, wherein the IMPDH inhibitor is ribavirin.

Claim 27 (Original): The method of any one of claims 21-26, wherein the host is a human.

Claim 28 (New): The method of claim 13 or 21, wherein the  $\beta$ -D-1,3-dioxolanyl purine is enantiomerically enriched.

Claim 29 (New): The method of claim 28, wherein the  $\beta$ -D-1,3-dioxolanyl purine that enantiomerically enriched is DAPD or DXG.

Claim 30 (New): The method of claim 13, wherein the drug-resistant virus is resistant to a  $\beta$ -D-1,3-dioxolanyl purine resistant virus.